

SEQ ID NO:1

1 GGCAATGGGT CGAAATTCAT AGAATTTTGT GTGAGGTGCG TAGCGGCTCT
51 GACAGGGGTG CTGCGCGGAG ATCTCTGGTC TCAGGTAGGG CGACAATGGA
101 GAGGTGTTAG TTGCCCCCTG TATCGCTCTC TGCGTGCGC ATTGGGTCAT
151 CCTGCCCCGA CATATGATAT TCCGCTAGAG GATTACTGAT AGTTTCTGCC
201 TGTCGGGCTT GTCGGGCTTG TCGGGCTTGT CGGGCTTGTC GGGCCTGTCC
251 CTCTTGTCCT GCCTGTCTC ACTTTTTCAC AATCAAAAAA TGGGCGAAGC
301 CCTTCTTGTT CTATAGTTCT TATAGTTCAT ACGAAAATTA CACATAATTA
351 TCAATAGCTT ATTCGCTTAA AAGGGAGTAA TTGGGCCGCA AAAGGGAGTA
401 ATTGGGCCGC AAAAGGGAGT AATTGGGCCG CAAAAGGGAG TAATTGGGCC
451 GATATCGGTT GTTTACATGG GGAGGAATCC CCTTAATCAT TTCTCCCCAT
501 GGGAAAGACA ACACAAGTGG CCGCAGACCG GGCCTTCGAC CAGACAAAAA
551 CTGTGCTCCC TGCCGAGGTG GCGAGAGGGG TCTATATGCG CAATCCGCCC
601 CGCCTGCAGG CGCTCAAGCT CATGCATTTA ATGATAGCCA CTGCGGGCGG
651 CCGCATGGCT GATGATGTGC GCCATGAAAT GCGGCTGGCC GACATTGCGG
701 CAATCGACGG CATGAAAAAC CATGACCGTG AGAGCCTGAC CCCGCTGTTT
751 GAGGAGCTAG CCGCTGCGGT GTTGACCAT GATGACCCTG CAAAGATGAT
801 CGTGACAGTC GCGGCTTGG TCGATGAGGC GCGAATAGAC TACCGCCAGG
851 AGGCAAGCGG CGAAC'TCCTA GTGACGTGGA CCTTCCGGAG TACATTCCGT
901 CGTATGGCGG CGGAGTCGAA CCACTGGGCC ATTCTCGACC GTCAAACGGT
951 ATTCCATCTC GGTAAGTAAGT ATTCCGTGCT GCTGTTCCAG CACGTCTCTA
1001 GTCTCGCCAA TCTTGATCGG ATGAGCGCGA AAACCTTTAC GGTCCCCGAG
1051 TTGCGGGCGC TCCTTGAGT GCCCGAGGGA AAGATGGTTC GTTGGAACGA
1101 CGTTAACAGA TTTGCTCTCA AACCTGCACT GGATGAGATC AACCATTAT
1151 CGCGTCTGAC ATTGACGGCA AAGCCGACCA AGATTGGCCG TAGCGTGGA
1201 AGTGTGACTA TAGGCTGGGA AGTGAAAGAC GACCCAACCG TCGCCAGGCG
1251 CGAGCTGGCG GGTTCGAAG TCGGTCGAGA TGCTCGTCGC AGAGGGGCGAG
1301 CGGAAACGAT AGCCCCCTCC TTCCAGAAAG CGGGCGGGAT CACCTACAGT
1351 CCACGTTGGC TGGAGCTGAA ACGCTCTGCT GGCAGCAACA AGGACAACGA
1401 TCTGATCGCC TCAGACTTCC GCGTTTCTG TCGGGAGAGA GGCGTGCGTC
1451 TGGACGCTGC AAACATCGAA AACTGTGTTT TAGATTTCTG CGCAAAGGTA
1501 GGGAAAGGTTT GAGTTTTGAG GTATTTACC GCAATAGTGT TAAATGACTT
1551 TCGTGAAACG ATGTGCAATA TAGCGGTAAG ACTATGAAAT ACACGGCTGG
1601 ACAGGCTGCA AAAGCAACGG GTGTGGCGAC CGCAACCATC ACTCGGGCGC
1651 TAAAAAGCGG TAAAATTTC GGTAAAAAAG ATGAATCTGG GGCATGGGTT
1701 ATAGATCCTG CAGAATTGCA CAGAGTGTTT CCTCCCATT CAAAGAAATA
1751 CACCGAAACA CCTAACACGC AAGTATATGG TAAGCGTGAT GAAACACATG
1801 AAATGACCTC AGAAATCAGC GCATTAGAGC GTGAAGTTCG GACTTTACGC
1851 GATGCTTTAT CTGATGCCAG GGAGGATCGC GACAAATGGC GCGACATGGC
1901 CGAGCGTCTT TCAATTTTCAT CACCGATGAG AGAGGAAGAC CGCCCCCTC
1951 AAAAACAAAG ATGGTGGAAG ATATTCTGAT CCTGGGCTTC AGGAGCCTTG

FIGURE 1A

2001 CCTTTACTGG CGGAAAAACG CGATATTGAG GCACAGGCCC GCACTTTAGA
2051 GGCGGAAGCC TATAACGAGT ACCAAAAACAC TAGAAGCCAG ATTGAGGAAA
2101 ATAGGGAACG TG

FIGURE 1B

2001
2051
2101

SEQ ID NO:2

1 TGGTGAACGC ATTGGCTTGA TGTTTGAGAA AAGCGAAAAG ACCCGGCCAC
51 AGTTGTGGGT AGAGCGTCGA TATGTGCAAG ACCTGATGCT TGCTGACATC
101 GAACTCCGTG TCTACCTCGC ATCGTCGCTG TATCAGCCTG CTGCGGATGG
151 CGGAAAGCCC GCCTATGGTC GTCACGCAGC CCTTAAGGCG ATGCGCGACT
201 TGGCCCATGC CGATCTGGTG CGTTTCACCA TCGGCCGGAT TACGCAACTG
251 GAGATGATCC TAGAGCGGTT AACCGAGACA TCTGGTTAAC GCCATAAAGG
301 CTGCGGCATG AAAATAGGCG GACAATCTGC GCTTGGCCGC CCCCGTTCTC
351 AGCCGTGCTT GCTCTCTGCC TGCATGGCAC GACGCAGGAT CGCGTTCATA
401 CGGGTCTGAT ATCCAGACCC GCGCGCCTTG AGCCATGCCA GCACATCGGC
451 ATCAAGCCGC GCGGTGATCT GCTGCTTGAT CGGGCGATAG AAGCGCCCAC
501 GCTCGGCGTC TGCCCATTTGG GCTTCGGTCA GCTCGGGAAC ATCGTTGGTG
551 TCGATCTGCT CGGGCGGCAG AGCGTCCAGC CGCGCCAATT TCTTGCGGCG
601 CTCCTCGGTA AGAGCGGGCA GCGTATCGAA GGTGTATTCA ACCATTGGCA
651 TATCTCTTCC TTTCTGCGG TGTAGCGCGG CGAGCCGAAA TGATGCGGAT
701 CGTCTCGACC GGATCGGGG CAGCCTCGAT GATCAGGTGG GCAACCAGAA
751 GGACGGCAGC GCCATAGATC TGCCCAACGG TTTGCCAGCG GTATTCCCCG
801 CCCTCGATCC TATCCTGAAC CGTCAGGTGC AACGGATCGG CGAACACATG
851 CACAGCATCC TCGAACCGBA TGCCATGCTT CTTTTCGTTC GTTTCCGCTT
901 TGGCGGGATC CCAGATAAAC CGCATCTTCA TGGCAGAATT ATAACACAC
951 ATTTGTAGTT ATTCAATGGC AAGTCGCAGG TTCAAATCAC GCGCCCAAAC
1001 CGCAACTGTA TTCGTTCTAC TCACGCGCGC TTTTGAATAG AAGCTTGCAT
1051 GATAACACCC GCCGCGTCCT CAACAAAATA AGGCAAATCC GCGCGCTGG
1101 CGCAATCTGC GCTTTGTCTGA TGCAAGGTCT TGTGGTTTCA TACTGCAAGA
1151 GCATGCAAGG AATTGCCCCG GATGAGCACC ACGACGACAC CCACCAAGCC
1201 GGCCTGGAAC AAGGGCCGCG TTGTCTGGGAA AAAGCCGCCG CTGACACCTG
1251 ACCAGATTGC CCTGATCCGT CTCATCCTGC GCCAGGAACG GCGGTGGCGG
1301 GATCTGGCTC TGTTCACGT GCGGATCGAC ACCAGTTTGC GCGGCTCGGA
1351 CCTCGTGCGC CTGCGCGTCT CGGATGTGGC GACCCAGCT GGTCTGCGTG
1401 AGATCGTCGA GATCCGCCAG AAGAAGACCG AGGCCCGCAA TGTCCGCCCC
1451 GTACAGGCCC GCCTGTCTGGA GGGGACACGC GAGAGCCTGC GGGTCTATCT
1501 CGCGGCCTCT GACAAGCCGC TGCACAGCTG GCTGTTTACC GGACAGGGCA
1551 TCCGCTGGTC CCACACCCAC CTTAGCGAGA GCCAGCTGTG GCGCCTGTTC
1601 AAGTCCTGGC TCGAGAAGGC GCGGCTCGAT CCCAGCCTCT ACGGGCTGCA
1651 CTCGCTGCGC CGAACCCTTCC CCAGCCACAT CTACCGCGAG ACCGGCAATC
1701 TGCGCGCCGC ACAGCTGCTG CTGGGCCATG CCAGCATCGA GAGCACCAG
1751 GAGTACATCG GCACCGAGCA AGCCGAGGCC CTCGATATCG CACGGAGGTA
1801 TCACCTCTAA CCCATGGAGA CCTATCTCGA GAAGCGCATC CCCGCCAAGA
1851 ACACAGCACG GTTCTACCGC ATGGCGGTCC TGCCGAACCT GTTCGGGGAA
1901 TGGACGCTGT ATCGAGAATG GGGCCGCATT GGCATCAGCG GCCGCATCCG
1951 GCTCGATTGG TTTGAGAGTG AACAAGATGC CATCGCTGCG ATGCTCGCCA

FIGURE 2A

2001 TCGAGACCGC CAAGCGTCAG CGCGGGTATT GGCTCGAGCC CATCCAGATT
 2051 GACATGTTCC CAGGGGCATA ACAGGCCATC AATGTAAGAG TGCAAGCGGA
 2101 GCAAGCAAAA GCCATTTCAC AGTGAGGTGG CAGATGTTCC TGTTTCACAG
 2151 TGAAAGCGCT GATGCTGTTT CCACGCCACA GACTGATACG ACCAAAGCAA
 2201 CGGGGTCTGC CGCCACAGAC CGGTTGCGCG GCCACCCGCA GAAACGCAGG
 2251 TAAATGGCG ATTTCCGCAA AAAAACCGTG CAAATGATGG CAAATCACCA
 2301 TCCAGTTTCA TCCTGAAACC CGTCGCTCAA CATGAACGAG CAGGCCATCA
 2351 TCCAAGCCCC AGAAACGCGG TCGGCGGACT ACAGATGAGC GATGTTCTGG
 2401 CTCATAGGCT GCAAGGCCCT GCAACAGTGA TTTCACCGTG AGATTGCAGG
 2451 GTCTTTTGGC TCTCCCGCAA GAGCCACCTC AGGGTGAGCG AGCTAGCCGT
 2501 CTAGGTTCAC AGTGAAATCG CTGAGGAGCG TTGCGGGGCT TATGGTTTGG
 2551 CTGGTCACGT TGGCCATCGG AATGGAGCAT ACGATGGCTT CTACGCAGTC
 2601 GAATCCTGAG GCTTCACGTG GGAAAAATAC GCTCCAAAAA AGCCCTGACC
 2651 AAATCTTGGA AAAATTGCTT GAAAAGTTTG CTTCTAAAAA ACTGGGAACG
 2701 AGATATGCAC GAGATCCCTT ACGAGTGCTG TAGGAGTAAT GCAGTGGACA
 2751 AAAACGCCAT TTTTTGCCCC AGTAGGAGTA ATGGAGTGGT TATTTTTTGG
 2801 GAGATTTTGC TTCAGTAGGA GTAACGCGTT GGTAAATTT GCTTGATTGG
 2851 CGGTTCAAAT CGACCACCGA GCTGCCGTTG GTCGTATTCT ATCTGCCCCG
 2901 CAATTGGGCA CTTGCAGGCC ATCCCCCTGA ACTTCTGGCG ATGACCATTT
 2951 CGAAGGCAAT GGGTCGAAAT TCATAGAATT TTGTGTGAGG TGCGTAGCGG
 3001 CTCTGACAGG GGTGCTGCGC GGAGATCTCT GGTCTCAGGT AGGGCGACAA
 3051 TGGAGAGGTG TTAGTTGCCC CCTGTATCGC TCTCTGCGTG GCGCATTGGG
 3101 TCATCCTGCC CGGACATATG ATATTCGCT AGAGGATTAC TGATAGTTTC
 3151 TGCTGTGCGG GCTTGTCGGG CTTGTCGGGC TTGTCGGGCT TGTCGGGCCCT
 3201 GTCCCTCTTG TCCCGCCTGT CCTCACTTTT TCACAATCAA AAAATGGGCG
 3251 AAGCCCTTCT TGTTCTATAG TTCTTATAGT TCATACGAAA ATTACACATA
 3301 ATTATCAATA GCTTATTCGC TTAAAAGGGA GTAATTGGGC CGCAAAAGGG
 3351 AGTAATTGGG CCGCAAAAGG GAGTAATTGG GCCGCAAAAG GGAGTAATTG
 3401 GGCCGATATC GGTGTTTAC ATGGGGAGGA ATCCCCTTAA TCATTTCTCC
 3451 CCATGGGAAA GACAACACAA GTGGCCGAG ACCGGGCCTT CGACCAGACA
 3501 AAAACTGTGC TCCCTGCCGA GGTGGCGAGA GGGGTCTATA TGCGCAATCC
 3551 GCCCCGCTG CAGGCGCTCA AGCTCATGCA TTTAATGATA GCCACTGCGG
 3601 GCGGCCGCAT GGCTGATGAT GTGCGCCATG AAATGCGGCT GGCCGACATT
 3651 CGCGCAATCG ACGGCATGAA AAACCATGAC CGTGAGAGCC TGACCCCGCT
 3701 GTTCGAGGAG CTAGCCGCTG CGGTGTTGAC CCATGATGAC CCTGCAAAGA
 3751 TGATCGTGAC AGTCGGCGGC TTGGTCGATG AGGCGCGAAT AGACTACCGC
 3801 CAGGAGGCAA GCGGCGAACT CCTAGTGACG TGGACCTTCC GGAGTACATT
 3851 CCGTCGTATG GCGGCGGAGT CGAACCACTG GGCCATTCTC GACCGTCAAA
 3901 CGGTATTCCA TCTCGGTAGT AAGTATTCCG TGCTGCTGTT CCAGCACGTC
 3951 TCTAGTCTCG CCAATCTTGA TCGGATGAGC GCGAAAACCT TTACGGTCCC
 4001 CGAGTTGCGG GCGCTCCTTG GAGTGCCCGA GGGAAAGATG GTTCGTTGGA
 4051 ACGACGTAA CAGATTTGCT CTCAAACCTG CACTGGATGA GATCAACCAT

FIGURE 2B

4101 TTATCGCGTC TGACATTGAC GGCAAAGCCG ACCAAGATTG GCCGTAGCGT
 4151 GGCAAGTGTG ACTATAGGCT GGGAAAGTGAA AGACGACCCA ACCGTCGCCA
 4201 GGCGCGAGCT GGCGGGTTCC AAGGTCGGTC GAGATGCTCG TCGCAGAGGG
 4251 GCAGCGGAAA CGATAGCCCC CTCCTTCCCA GAAGCGGGCG GGATCACCTA
 4301 CAGTCCACGT TGGCTGGAGC TGAAACGCTC TGCTGGCAGC AACAAGGACA
 4351 ACGATCTGAT CGCCTCAGAC TTCCGGCGTT TCTGTCGGGA GAGAGGCGTG
 4401 CGTCTGGACG CTGCAAACAT CGAAAACTG TTTTtagatt TCTGCGCAAA
 4451 GGTAGGGAAG GTTTGAGTTT TGAGGTATTT CACCGCAATA GTGTAAATG
 4501 ACTTTCGTGA AACGATGTGC AATATAGCGG TAAGACTATG AAATACACGG
 4551 CTGGACAGGC TGCAAAAGCA ACGGGTGTGG CGACCGCAAC CATCACTCGG
 4601 GCGCTAAAAA GCGGTAAAAT TTCCGGTAAA AAAGATGAAT CTGGGGCATG
 4651 GGTTATAGAT CCTGCAGAAT TGCACAGAGT GTTTCCTCCC ATTTCAAAGA
 4701 AATACACCGA AACACCTAAC ACGCAAGTAT ATGGTAAGCG TGATGAAACA
 4751 CATGAAATGA CCTCAGAAAT CAGCGCATTa GAGCGTGAAG TTCGGACTTT
 4801 ACGCGATGCT TTATCTGATG CCAGGGAGGA TCGCGACAAA TGGCGCGACA
 4851 TGGCCGAGCG TCTTTCAATT TCATCACCGA TGAGAGAGGA AGACCGCCCC
 4901 CCTCAAAAAC AAAGATGGTG GAAGATATTC TGATCCTGGG CTTcaggagc
 4951 CTTGCCTTTA AAACCTGAAT CAGCATTCTA GCGATGCTGA TAAGAAGTAA
 5001 ATATAGCCAC AATAGAGCGG CCATTTTCCA TTCACATACA GCTCATCATG
 5051 TGATCAATAT CAAGTATTGA TATTCATCAA TGGAGAAGAA TTTACATGTA
 5101 TCACAGGATC ATCACAGCAT TTGTTTTTGT ATTTCTAAGT GCTAACATAA
 5151 CTATCGCTGG CCTTAAAGAA GATTGTACTA TTGCAGTATC TCACCTTGGG
 5201 TTTCAGACCG ATAATTACAG CTTTGTGCGA GCCGGTTTTT TTGCCAGAGA
 5251 GAGACACGTT TTTGATGGTG TAATAAACTG CTACGTATCT CATGATGGTA
 5301 ACATACACAG CATCATCCGG GGCAACACAC CTCTTATGGA AGATGGATAT
 5351 TATGGCCCAG AAGTACTGGC GGAAAAACGC GATATTGAGG CACAGGCCCG
 5401 CACTTTAGAG GCGGAAGCCT ATAACGAGTA CAAAACACT AGAAGCCAGA
 5451 TTGAGGAAAA TAGGGAACGT GCCCTCGAGG CGCTGCGGCT AGCTAGCAGT
 5501 CCTTTTATTA ATAATGGTAG TACAGAAGAA CAGACAATTA TACAGGCCGC
 5551 AACTCCGACG GCAGATCCTG TTGTATCTGT ACCCGTGGCA TCTCCAGAAT
 5601 CTAAACAAAG TCGAGAGCCG GAACCGGCTG CTGTTCCAGC ATCAGTTTCT
 5651 GTTAGAGAGA TGTGGAGCAC GGCTGACAGA TTGACCACCC GTACATGCCC
 5701 ATCGACTCGA TGCGGAGCAA CTAGCTGGGT AACAGATGGA ACTAAAGTAA
 5751 CAGTTTATGA AGAAAAAGAC GGTGGTCTA GAATCGGAGA GCTACAGTCT
 5801 GCAATGTGCA TAAATGGAAT AAGTGGCGCG GTCGATTcag GTGAATCTTC
 5851 CTGCAATCCC ACCAATGGTA TCGTTAATGG GCAATTcGCA CCCTGGGTTT
 5901 TCTCGGATTA TCTTACGATC CAAGAGCCAG AAGCTCCCAT ATCCACCCAA
 5951 GAGTGTGCGA ATATGGGGCT CGAGAACTCA GATAATTACC GTATCTATTC
 6001 TAGTCAGTTC TGCACTGCCG CTCTCGAAAT GATCAACGAT AGAGTATGCA
 6051 ATACATCTGA TTTCAGAGAT TTAGCTTGGT TATCTTCTCC TGAAAGAGGA
 6101 CAGGATTACT ACTTCACCTA TTGTGGCGGA TTTCAACCTC AAAACAGATG
 6151 GTATTTGAAT GTCAGGACAG GTGAAATCAC CCGCTGATAT TCCACCAAGG

FIGURE 2C

6201 TGAGTCCTGT AGATCAGACT CTCAAGGAGT AAACGTTTTA ATCCATCTCC
 6251 ATGAGATCAA CATAGATAGG TGTTTCAGTCC CGGCATCTGG TGGATCGGGT
 6301 TTAGGATGAA TCTGTCCGGC TCTTGACATA CCCCCGCGTG AAACCCTGTC
 6351 TTTACAAGAG AAAGTCAGCG GCCTCGAAGC CGCTCTAGCC GATGCCCCGG
 6401 CCCAACGGGA TGAGTAGAGC GAACAAGCAA AGCGCCTAGC TATGGCTCTG
 6451 CCCGTCCCGG AAGCTGCAGC CGCAGAATCC GGAAAAAAGA AAAAATACAT
 6501 GGCAGCGATT ATTTGGATAG GACACAATCC TTTTCTATTA ATATACAACA
 6551 AGATATGGGC ATGCGCCGCG CGTGATCCTC ATTCGATACA ATCCAAATCC
 6601 TGAAAGCTGA CTATGCCCTA CGCATCGCGC ACCATCGGTG CCGTCATTGA
 6651 TGACGTGAAC CGCACCTACC TGCTGCCCCG AATCCAACGC CCCTATGTCT
 6701 GGTCTGCCGG ACAGGTCGTT GCGCTGTTTC ACTCTCTGTT GAAGGGCTAT
 6751 CCGATCAGCA GCTTCATGTT CTGGGCGGTG GACGAGGAGA CCAAGGCAGA
 6801 GCTGCGATGC TACAAATTCA TCGAGAATTA TCGGCCCGAA ATGATGAACG
 6851 AGCCGACTAG TGCGGACGGG CGGCAGGTCG TCCTTGTGCT CGACGGACAG
 6901 CAGCGGATGA CCTCACTGTT GATCGGCTTG CGCGGCACAT TCTCTGAGAA
 6951 AGCCAAACAC GCGCGCAACA GCAACGCGGC GGCCTGGTCG GCAAAAACGC
 7001 TATATCTAGA CCTGCTTCGG GACCCGGATC CGAAGAATC CGATGAAGAC
 7051 GAAGGCAATG AGTTCGGAAT CACTTACGGT CTCTCTTTCC ATGAACGCCG
 7101 CCCGACCAGC AGCCACAGGC ACCACTGGTT CAAGGTGGGA TCGATACTGG
 7151 ATTATCCTAC AGACGAGCAG CTGGAGGGGT TGATTGCCAA GGTGAAGACC
 7201 GAATTTTCATC ATGGTGTATC GGATTGGGAA AAGGGGCTGG CGGAAGACAC
 7251 CCTGCGCCGG TTGCACCGCG TCATCTGGAA AGACGAGGGC ATCAACTTTT
 7301 TCACTGAACG CGACCAGTCG GTTGATCGGG TGCTGGACAT CTTCGTGCGG
 7351 GCCAATGACG GGGGCACGAA ACTGTCGAAG GCAGACCTGC TGATGTCGAT
 7401 GATCACGTCA AAATGGTCCA GCGGATCGGC CCGCGAGGAA ATCGGCGGCT
 7451 TTGTCGAGCA CATAAACAAA GGTCTCGGTG CGCCGAACAA GATCAGTCGC
 7501 GATCTGGTCC TGAAGGCCTG TCTGGTCGTC TGCGATTATG ATGTCGTCTA
 7551 TAATGTCAGG AACTTTACAA GCGAGGTCAT CGGCAGGATC GAAAGCAACT
 7601 GGGATCGTAT CAAGCAGGCA TTCGAGAACA CGTTCCGCCT GCTGAACAGG
 7651 CATGGCATCA CCGGGGATAA CCTCGGCTCT TTGAACGCGG TGCTGCCTCT
 7701 GGTCTATTAT ATCTACAACA CGCCGGATTT CGATTTCCGA GGATCGAGCG
 7751 AGTTCGAGCG GGTCAATGCC AGCTCCATGC ACCTCTGGTT GGTGAACAGC
 7801 CTGCTGGTCA GCGCCTTCGT TGGCCATTCG GATCAGACCA TCACCACCGC
 7851 GCGCAATACG ATCCGCGATC ACCTGCGTGT AGGCCGCGAT TTCCAGTAC
 7901 GAAAGCTGTT CGATGCCATG GCGAAGGGG GACGGCTATC TCAGGTGGAT
 7951 GAGCGTACCA TCGAAGAATT GCTGGAAATG CAATATGGCA AGCCCCGGAC
 8001 CTTCGTTGCG CTGTCGCTGC TCTATCAGGG CATCGACTGG AACGGATCGA
 8051 CCTGGCATGT CGATCATATC ATTCCCAAG CGGACGCTCA GAAAAATGTG
 8101 CTGCGCGGGC GCAATCTGCC CGAGCATCGC ATTCAGGAAA TCTTGGGCGC
 8151 GGTTAACAGT TTGGGCAACC TGCAACTTTT GCGCGGAGAT GAGAATATCG
 8201 AGAAAGGTGC GCTGCCATTC AGGTCATGGA TTACCGGACG GCGCGTTGAT
 8251 TTCTACGAGC AGCATATGAT CCCGGCGCAC CTTGAATGT GCGATGTACT

FIGURE 2D

8301 GCATCTGCCC GAGTTCGTGC GCGAACGGGA AAAGGTGATC CGGCGCCGTT
8351 TGATGGAGTT GGTCGGAGCA CGACGCGCAT GAATGAGGTC GTCTTGTCAC
8401 GCGAAGAGCT GCGTCAATCT TGTCTCGACC TGCTTGAAAA ACGCGCTGTC
8451 GAACACCCTG CGGGACACCA AGGCAAGCTC GCCGCCCGCT ATGTTGTGCA
8501 CCGCGACGA

FIGURE 2E

8301
8351
8401
8451
8501

SEQ ID NO:3

1 TCGCGCGTTT CGGTGATGAC GGTGAAAACC TCTGACACAT GCAGCTCCCCG
51 GAGACGGTCA CAGCTTGTCT GTAAGCGGAT GCCGGGAGCA GACAAGCCCCG
101 TCAGGGCGCG TCAGCGGGTG TTGGCGGGTG TCGGGGCTGG CTTAACTATG
151 CGGCATCAGA GCAGATTGTA CTGAGAGTGC ACCATATGCG GTGTGAAATA
201 CCGCACAGAT GCGTAAGGAG AAAATACCGC ATCAGGCGCC ATTCGCCATT
251 CAGGCTGCGC AACTGTTGGG AAGGGCGATC GGTGCGGGCC TCTTCGCTAT
301 TACGCCAGCT GCGGAAAGGG GGATGTGCTG CAAGGCGATT AAGTTGGGTA
351 ACGCCAGGGT TTTCCCAGTC ACGACGTTGT AAAACGACGG CCAGTGAATT
401 CGGCAATGGG TCGAAATTCA TAGAATTTTG TGTGAGGTGC GTAGCGGCTC
451 TGACAGGGGT GCTGCGCGGA GATCTCTGGT CTCAGGTAGG GCGACAATGG
501 AGAGGTGTTA GTTGCCCCCT GTATCGCTCT CTGCGTGGCG CATTGGGTCA
551 TCCTGCCCCG ACATATGATA TTCCGCTAGA GGATTACTGA TAGTTTCTGC
601 CTGTGCGGGCT TGTGCGGGCTT GTCGGGCTTG TCGGGCTTGT CGGGCCTGTC
651 CCTCTTGTC CGCCTGTCCT CACTTTTTCA CAATCAAAAA ATGGGCGAAG
701 CCCTTCTTGT TCTATAGTTC TTATAGTTCA TACGAAAATT ACACATAATT
751 ATCAATAGCT TATTCGCTTA AAAGGGAGTA ATTGGGCCGC AAAAGGGAGT
801 AATTGGGCCG CAAAAGGGAG TAATTGGGCC GCAAAGGGA GTAATTGGGC
851 CGATATCGGT TGTTTACATG GGGAGGAATC CCCTTAATCA TTTCTCCCCA
901 TGGGAAAGAC AACACAAGTG GCCGCAGACC GGGCCTTCGA CCAGACAAAA
951 ACTGTGCTCC CTGCCGAGGT GGCGAGAGGG GTCTATATGC GCAATCCGCC
1001 CCGCCTGCAG GCGCTCAAGC TCATGCATTT AATGATAGCC ACTGCGGGCG
1051 GCCGCATGGC TGATGATGTG CGCCATGAAA TGCGGCTGGC CGACATTCGC
1101 GCAATCGACG GCATGAAAAA CCATGACCGT GAGAGCCTGA CCCCCTGTT
1151 CGAGGAGCTA GCCGCTGCGG GTTTGACCCA TGATGACCCT GCAAAGATGA
1201 TCGTGACAGT CGGCGGCTTG GTCGATGAGG CGCGAATAGA CTACCGCCAG
1251 GAGGCAAGCG GCGAACTCCT AGTGACGTGG ACCTTCCGGA GTACATTCCG
1301 TCGTATGGCG GCGGAGTCGA ACCACTGGGC CATTCTCGAC CGTCAAACGG
1351 TATTCCATCT CGGTAGTAAG TATTCCGTGC TGCTGTTCCA GCACGTCTCT
1401 AGTCTCGCCA ATCTTGATCG GATGAGCGCG AAAACCTTTA CGGTCCCCGA
1451 GTTGCGGGCG CTCCTTGGAG TGCCCGAGGG AAAGATGGTT CGTTGGAACG
1501 ACGTTAACAG ATTTGCTCTC AAACCTGCAC TGGATGAGAT CAACCATTTA
1551 TCGCGTCTGA CATTGACGGC AAAGCCGACC AAGATTGGCC GTAGCGTGGC
1601 AAGTGTGACT ATAGGCTGGG AAGTGAAAGA CGACCCAACC GTCGCCAGGC
1651 GCGAGCTGGC GGGTTCCAAG GTCGGTCGAG ATGCTCGTCG CAGAGGGGCA
1701 GCGGAAACGA TAGCCCCCTC CTTCCAGAA GCGGGCGGGA TCACCTACAG
1751 TCCACGTTGG CTGGAGCTGA AACGCTCTGC TGGCAGCAAC AAGGACAACG
1801 ATCTGATCGC CTCAGACTTC CGGCGTTTCT GTCGGGAGAG AGGCGTGCGT
1851 CTGGACGCTG CAAACATCGA AAAACTGTTT TTAGATTTCT GCGCAAAGGT
1901 AGGGAAGGTT TGAGTTTTGA GGTATTTTAC CGCAATAGTG TTAAATGACT
1951 TTCGTGAAAC GATGTGCAAT ATAGCGGTAA GACTATGAAA TACACGGCTG

FIGURE 3A

2001 GACAGGCTGC AAAAGCAACG GGTGTGGCGA CCGCAACCAT CACTCGGGCG
 2051 CTAAAAAGCG GTAAAAATTC CGGTAAAAAA GATGAATCTG GGGCATGGGT
 2101 TATAGATCCT GCAGAATTGC ACAGAGTGTT TCCTCCCATT TCAAAGAAAT
 2151 ACACCGAAAC ACCTAACACG CAAGTATATG GTAAGCGTGA TGAAACACAT
 2201 GAAATGACCT CAGAAATCAG CGCATTAGAG CGTGAAGTTC GGACTTTACG
 2251 CGATGCTTTA TCTGATGCCA GGGAGGATCG CGACAAATGG CGCGACATGG
 2301 CCGAGCGTCT TTCAATTTCA TCACCGATGA GAGAGGAAGA CCGCCCCCTT
 2351 CAAAAACAAA GATGGTGGAA GATATTCTGA TCCTGGGCTT CAGGAGCCTT
 2401 GCCTTTACTG GCGGAAAAAC GCGATATTGA GGCACAGGCC CGCACTTTAG
 2451 AGGCGGAAGC CTATAACGAG TACCAAAACA CTAGAAGCCA GATTGAGGAA
 2501 AATAGGGAAC GTGGGATCCT CTAGAGTCGA CCTGCAGGCA TGCAAGCTTG
 2551 GCGTAATCAT GGTCATAGCT GTTTCCTGTG TGAAATTGTT ATCCGCTCAC
 2601 AATTCCACAC AACATACGAG CCGGAAGCAT AAAGTGTAAG GCCTGGGGTG
 2651 CCTAATGAGT GAGCTAACTC ACATTAATTG CGTTGCGCTC ACTGCCCGCT
 2701 TTCCAGTCGG GAAACCTGTC GTGCCAGCTG CATTAATGAA TCGGCCAACG
 2751 CGCGGGGAGA GGCGGTTTGC GTATTGGGCG CTCTTCCGCG CTCGGTCTTG
 2801 CCTTGCTCGT CGGTGATGTA CTTACCAGC TCCGCGAAGT CGCTCTTCTT
 2851 GATGGAGCGC ATGGGGACGT GCTTGGCAAT CACGCGCACC CCCC GGCCGT
 2901 TTTAGCGGCT AAAAAAGTCA TGGCTCTGCC CTCGGGCGGA CCACGCCCAT
 2951 CATGACCTTG CCAAGCTCGT CCTGCTTCTC TTCGATCTTC GCCAGCAGGG
 3001 CGAGGATCGT GGCATCACCG AACC GCGCCG TGCGCGGGTC GTCGGTGAGC
 3051 CAGAGTTTCA GCAGGCCGCC CAGGCGGCC AGGTCGCCAT TGATGCGGGC
 3101 CAGCTCGCGG ACGTGCTCAT AGTCCACGAC GCCCGTGATT TTGTAGCCCT
 3151 GGCCGACGGC CAGCAGGTAG GCCGACAGGC TCATGCCGGC CGCCGCCGCC
 3201 TTTTCCCTCA TCGCTCTTCG TTCGTCTGGA AGGCAGTACA CCTTGATAGG
 3251 TGGGCTGCCC TTCCTGGTTG GCTTGGTTTC ATCAGCCATC CGCTTGCCCT
 3301 CATCTGTTAC GCCGGCGGTA GCCGGCCAGC CTCGCAGAGC AGGATTCCCC
 3351 TTGAGCACCG CCAGGTGCGA ATAAGGGACA GTGAAGAAGG AACACCCGCT
 3401 CGCGGGTGGG CCTACTTCAC CTATCCTGCC CGGCTGACGC CGTTGGATAC
 3451 ACCAAGGAAA GTCTACACGA ACCCTTTGGC AAAATCCTGT ATATCGTGCG
 3501 AAAAAAGGATG GATATACCGA AAAAATCGCT ATAATGACCC CGAAGCAGGG
 3551 TTATGCAGCG GAAAAGCTTC CTCGCTCACT GACTCGCTGC GCTCGGTCTG
 3601 TCGGCTGCGG CGAGCGGTAT CAGCTCACTC AAAGGCGGTA ATACGGTTAT
 3651 CCACAGAATC AGGGGATAAC GCAGGAAAGA ACATGTGAGC AAAAGGCCAG
 3701 CAAAAGGCCA GGAACCGTAA AAAGGCCGCG TTGCTGGCGT TTTTCCATAG
 3751 GCTCCGCCCC CCTGACGAGC ATCACA AAAA TCGACGCTCA AGTCAGAGGT
 3801 GGCGAAACCC GACAGGACTA TAAAGATACC AGGCGTTTCC CCCTGGAAGC
 3851 TCCCTCGTGC GCTCTCCTGT TCCGACCCTG CCGCTTACCG GATACCTGTC
 3901 CGCCTTTCTC CCTTCGGGAA GCGTGGCGCT TTCTCATAGC TCACGCTGTA
 3951 GGTATCTCAG TTCGGTGTAG GTCGTTGCT CCAAGCTGGG CTGTGTGCAC
 4001 GAACCCCCCG TTCAGCCCGA CCGCTGCGCC TTATCCGGTA ACTATCGTCT
 4051 TGAGTCCAAC CCGGTAAGAC ACGACTTATC GCCACTGGCA GCAGCCACTG

FIGURE 3B

4101 GTAACAGGAT TAGCAGAGCG AGGTATGTAG GCGGTGCTAC AGAGTTCTTG
 4151 AAGTGGTGGC CTAACCTACGG CTACACTAGA AGGACAGTAT TTGGTATCTG
 4201 CGCTCTGCTG AAGCCAGTTA CCTTCGGAAA AAGAGTTGGT AGCTCTTGAT
 4251 CCGGCAAAACA AACCACCGCT GGTAGCGGTG GTTTTTTTGT TTGCAAGCAG
 4301 CAGATTACGC GCAGAAAAAA AGGATCTCAA GAAGATCCTT TGATCTTTTC
 4351 TACGGGGTCT GACGCTCAGT GGAACGAAAA CTCACGTAA GGGATTTTGG
 4401 TCATGAGATT ATCAAAAAGG ATCTTCACCT AGATCCTTTT GGGGGGGGGG
 4451 GGCGCTGAGG TCTGCCTCGT GAAGAAGGTG TTGCTGACTC ATACCAGGCC
 4501 TGAATCGCCC CATCATCCAG CCAGAAAGTG AGGGAGCCAC GGTTGATGAG
 4551 AGCTTTGTTG TAGGTGGACC AGTTGGTGAT TTTGAACTTT TGCTTTGCCA
 4601 CGGAACGGTC TCGGTTGTCT GGAAGATGCG TGATCTGATC CTTCAACTCA
 4651 GCAAAAGTTC GATTTATTCA ACAAAGCCGC CGTCCCGTCA AGTCAGCGTA
 4701 ATGCTCTGCC AGTGTTACAA CCAATTAACC AATTCTGATT AGAAAACTC
 4751 ATCGAGCATC AAATGAACT GCAATTTATT CATATCAGGA TTATCAATAC
 4801 CATATTTTGT AAAAAGCCGT TTCTGTAATG AAGGAGAAAA CTCACCGAGG
 4851 CAGTTCCATA GGATGGCAAG ATCCTGGTAT CGGTCTGCGA TTCCGACTCG
 4901 TCCAACATCA ATACAACCTA TTAATTTCCC CTCGTCAAAA ATAAGTTAT
 4951 CAAGTGAGAA ATCACCATGA GTGACGACTG AATCCGGTGA GAATGGCAAA
 5001 AGCTTATGCA TTTCTTTCCA GACTTGTTCA ACAGGCCAGC CATTACGCTC
 5051 GTCATCAAAA TCACTCGCAT CAACCAAACC GTTATTCATT CGTGATTGCG
 5101 CCTGAGCGAG ACGAAATACG CGATCGCTGT TAAAAGGACA ATTACAAACA
 5151 GGAATCGAAT GCAACCGGCG CAGGAACACT GCCAGCGCAT CAACAATATT
 5201 TTCACCTGAA TCAGGATATT CTTCTAATAC CTGGAATGCT GTTTTCCCGG
 5251 GGATCGCAGT GGTGAGTAAC CATGCATCAT CAGGAGTACG GATAAAATGC
 5301 TTGATGGTCG GAAGAGGCAT AAATTCCGTC AGCCAGTTTA GTCTGACCAT
 5351 CTCATCTGTA ACATCATTTG CAACGCTACC TTTGCCATGT TTCAGAAACA
 5401 ACTCTGGCGC ATCGGGCTTC CCATACAATC GATAGATTGT CGCACCTGAT
 5451 TGCCCGACAT TATCGCGAGC CCATTTATAC CCATATAAAT CAGCATCCAT
 5501 GTTGGAATTT AATCGCGGCC TCGAGCAAGA CGTTTCCCGT TGAATATGGC
 5551 TCATAACACC CCTTGTATTA CTGTTTATGT AAGCAGACAG TTTTATTGTT
 5601 CATGATGATA TATTTTTATC TTGTGCAATG TAACATCAGA GATTTTGAGA
 5651 CACAACGTGG CTTTCCCCC CCCCCATTA TTGAAGCATT TATCAGGGTT
 5701 ATTGTCTCAT GAGCGGATAC ATATTTGAAT GTATTTAGAA AAATAAACAA
 5751 ATAGGGGTTC CGCGCACATT TCCCCGAAAA GTGCCACCTG ACGTCTAAGA
 5801 AACCATTATT ATCATGACAT TAACCTATAA AAATAGGCGT ATCAGAGGC
 5851 CCTTTCGTC

FIGURE 3C

SEQ ID NO:4

1 GGCAATGGGT CGAAATTCAT AGAATTTTGT GTGAGGTGCG TAGCGGCTCT
51 GACAGGGGTG CTGCGCGGAG ATCTCTGGTC TCAGGTAGGG CGACAATGGA
101 GAGGTGTTAG TTGCCCCCTG TATCGCTCTC TGCGTGCGC ATTGGGTCAT
151 CCTGCCCCGA CATATGATAT TCCGCTAGAG GATTACTGAT AGTTTCTGCC
201 TGTCGGGCTT GTCGGGCTTG TCGGGCTTGT CGGGCTTGTC GGGCCTGTCC
251 CTCTTGTCCT GCCTGTCTC ACTTTTTCAC AATCAAAAAA TGGGCGAAGC
301 CCTTCTTGTT CTATAGTTCT TATAGTTCAT ACGAAAATTA CACATAATTA
351 TCAATAGCTT ATTGCTTAA AAGGGAGTAA TTGGGCCGCA AAAGGGAGTA
401 ATTGGGCCGC AAAAGGGAGT AATTGGGCCG CAAAAGGGAG TAATTGGGCC
451 GATATCGGTT GTTTACATGG GGAGGAATCC CTTAATCAT TTCTCCCCAT
501 GGGAAAGACA ACACAAGTGG CCGCAGACCG GGCCTTCGAC CAGACAAAAA
551 CTGTGCTCCC TGCCGAGGTG GCGAGAGGGG TCTATATGCG CAATCCGCCC
601 CGCCTGCAGG CGCTCAAGCT CATGCATTTA ATGATAGCCA CTGCGGGCGG
651 CCGCATGGCT GATGATGTGC GCCATGAAAT GCGGCTGGCC GACATTCGCG
701 CAATCGACGG CATGAAAAAC CATGACCGTG AGAGCCTGAC CCCGCTGTTC
751 GAGGAGCTAG CCGCTGCGGT GTTGACCCAT GATGACCCTG CAAAGATGAT
801 CGTGACAGTC GCGGGCTTGG TCGATGAGGC GCGAATAGAC TACCGCCAGG
851 AGGCAAGCGG CGAACTCCTA GTGACGTGGA CCTTCCGGAG TACATTCCGT
901 CGTATGGCGG CGGAGTCGAA CCACTGGGCC ATTCTCGACC GTCAAACGGT
951 ATTCCATCTC GGTAGTAAGT ATTCCGTGCT GCTGTTCCAG CACGTCTCTA
1001 GTCTCGCCAA TCTTGATCGG ATGAGCGCGA AAACCTTTAC GGTCCCCGAG
1051 TTGCGGGCGC TCCTTGAGT GCCCGAGGGA AAGATGGTTC GTTGAACGA
1101 CGTTAACAGA TTTGCTCTCA AACCTGCACT GGATGAGATC AACCATTAT
1151 CGCGTCTGAC ATTGACGGCA AAGCCGACCA AGATTGGCCG TAGCGTGGCA
1201 AGTGTGACTA TAGGCTGGGA AGTGAAAGAC GACCCAACCG TCGCCAGGCG
1251 CGAGCTGGCG GGTTCGAAG TCGGTGAGA TGCTCGTCGC AGAGGGGCAG
1301 CGGAAACGAT AGCCCCCTCC TTCCCAGAAG CGGGCGGGAT CACCTACAGT
1351 CCACGTTGGC TGGAGCTGAA ACGCTCTGCT GGCAGCAACA AGGACAACGA
1401 TCTGATCGCC TCAGACTTCC GCGTCTTCTG TCGGGAGAGA GCGTGCCTC
1451 TGGACGCTGC AAACATCGAA AACTGTTTT TAGATTTCTG CGCAAAGGTA
1501 GGGAAGGTTT GAGTTTTGAG GTATTTTACC GCAATAGTGT TAAATGACTT
1551 TCGTGAAACG ATGTGCAATA TAGCGGTAAG ACTATGAAAT ACACGGCTGG
1601 ACAGGCTGCA AAAGCAACGG GTGTGGCGAC CGCAACCATC ACTCGGGCGC
1651 TAAAAAGCGG TAAATTTCC GGTAAAAAAG ATGAATCTGG GGCATGGGTT
1701 ATAGATCCTG CAGAATTGCA CAGAGTGTTC CCTCCCATTT CAAAGAAATA
1751 CACCGAAACA CTAACACGC AAGTATATGG TAAGCGTGAT GAAACACATG
1801 AAATGACCTC AGAAATCAGC GCATTAGAGC GTGAAGTTCG GACTTTACGC
1851 GATGCTTTAT CTGATGCCAG GGAGGATCGC GACAAATGGC GCGACATGGC
1901 CGAGCGTCTT TCAATTTTAT CACCGATGAG AGAGGAAGAC CGCCCCCTC
1951 AAAACAAAAG ATGGTGAAG ATATTCTGAT CCTGGGCTTC AGGAGCCTTG

FIGURE 4A

2001	CCTTTAAAC	CTGAATCAGC	ATTCTAGCGA	TGCTGATAAG	AAGTAAATAT
2051	AGCCACAATA	GAGCGGCCAT	TTTCCATTCA	CATACAGCTC	ATCATGTGAT
2101	CAATATCAAG	TATTGATATT	CATCAATGGA	GAAGAATTTA	CATGTATCAC
2151	AGGATCATCA	CAGCATTTGT	TTTTGTATTT	CTAAGTGCTA	ACATAACTAT
2201	CGCTGGCCCT	AAAGAAGATT	GTACTATTGC	AGTATCTCAC	CTTGGGTTTC
2251	AGACCGATAA	TTACAGCTTT	GTCGAAGCCG	GTTTTTTTGC	CAGAGAGAGA
2301	CACGTTTTTG	ATGGTGTAAT	AAACTGCTAC	GTATCTCATG	ATGGTAACAT
2351	ACACAGCATC	ATCCGGGGCA	ACACACCTCT	TATGGAAGAT	GGATATTATG
2401	GCCCAGAAGT	ACTGGCGGAA	AAACGCGATA	TTGAGGCACA	GGCCCCGACT
2451	TTAGAGGCGG	AAGCCTATAA	CGAGTACCAA	AACACTAGAA	GCCAGATTGA
2501	GGAAAATAGG	GAACGTG			

FIGURE 4B